

Collider Accelerator Department and Superconducting Magnet Division

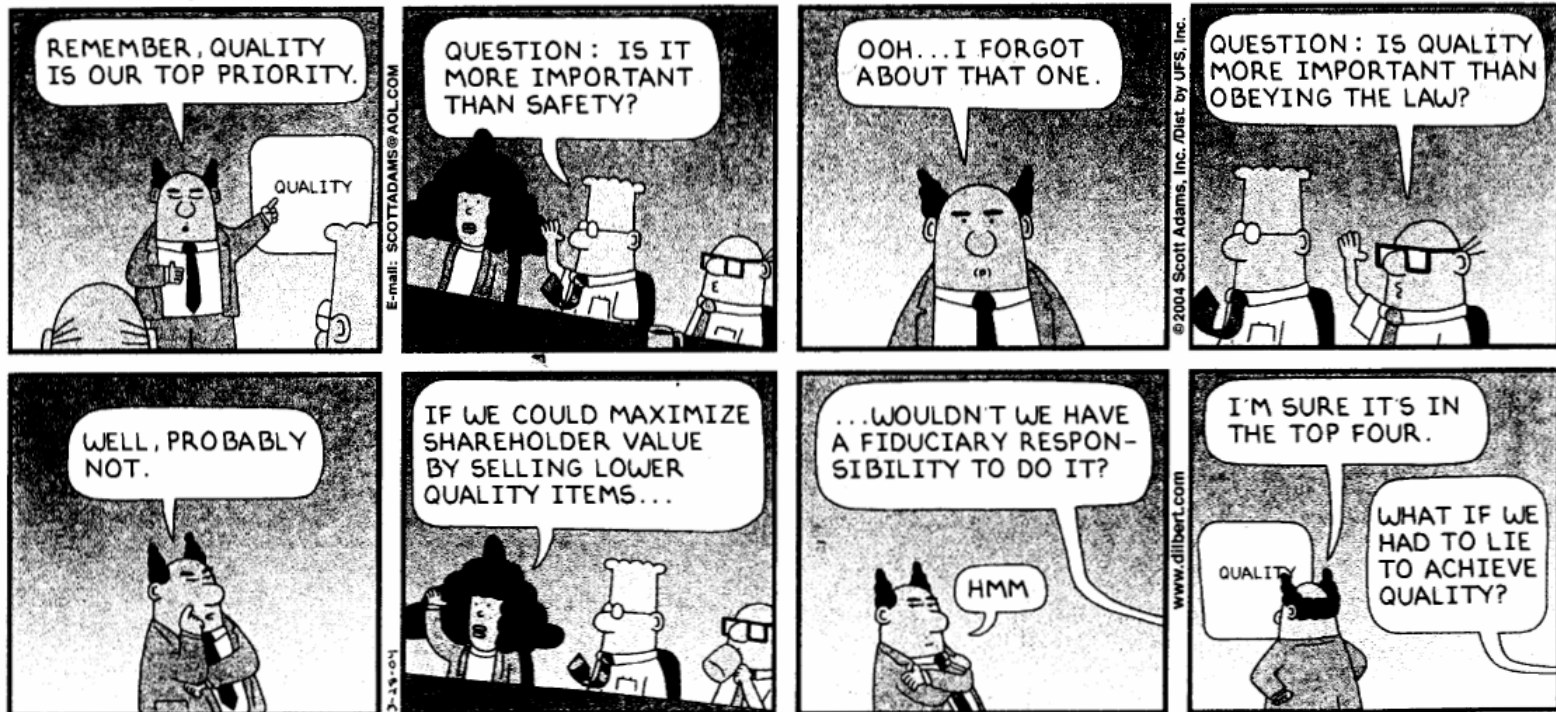
18001 Year 3!



5 Fundamental Beliefs About Safety

1. Safety is an overarching priority

DILBERT®/ by Scott Adams



5 Fundamental Beliefs About Safety

2. All injuries can be prevented
3. Excellence in safety is compatible with excellence in schedule
4. Safety must be made an integral part of every job
5. Good safety is “mainly in the head”



5 Fundamental Beliefs about Safety Management

1. Top management must be committed to excellence
2. The line must be accountability for safety and for injuries
3. Workers must be involved in safety
4. Safety training is essential
5. A broad array of safety systems and practices is needed

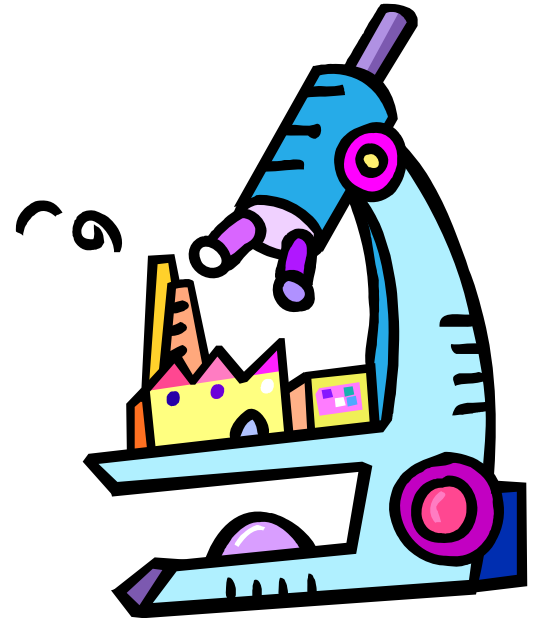
What are the main safety systems that make up the broad array at C-AD?

- DOE Orders
 - DOE Order 420.2B, Accelerator Safety
 - DOE Order 420.1A, Facility Safety, §§ 4.2 and 4.4
 - DOE Order 414.1C, Quality Assurance
- BNL Requirements (SBMS)
 - Accelerator Safety
 - Work Planning and Control for Operations
 - Construction Safety
- C-AD Management Systems
 - OSH Management System, OHSAS 18001
 - Environmental Management System, ISO 14001
 - Conduct of Operations Agreement
 - Self-Assessment Program



What is covered during an OHSAS 18001 interview?

- Management interviews focus on:
 - OSH objectives and targets
 - roles and responsibilities
 - resources associated with the OSH system
- Staff interviews focus on:
 - awareness of the OSH policy
 - awareness of work planning
 - awareness of job risks
 - how staff learn about requirements
 - how you control hazards
 - objectives and targets
 - training and communication
 - corrective and preventive action
 - use of procedures



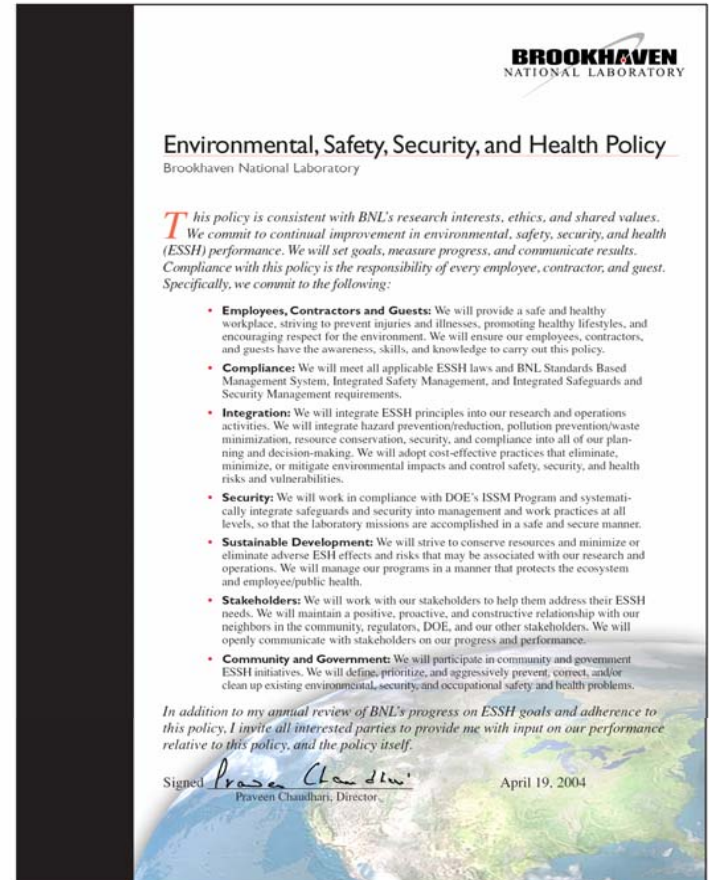
What is the main commitment in the BNL ESSH Policy?

- Main commitment: Provide a safe and healthy workplace!
- Policy highlights:
 - We are all responsible for safety
 - Consider the safety of others
 - Integrate ESSH into our research and operations
 - Comply with BNL ESSH requirements
 - Reduce risks, conserve resources, protect property, prevent pollution
 - Assist stakeholders with their ESSH needs
 - Participate in community and government initiatives

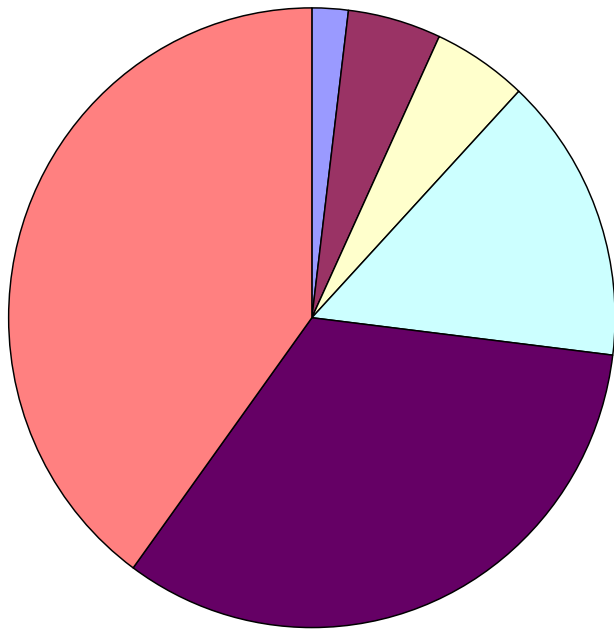
What aids may be used to explain the ESSH Policy?

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- Badge-cards are available
- Show the written policy posted in B911 or B902 Lobby
- You may have a copy to refer to during the interview

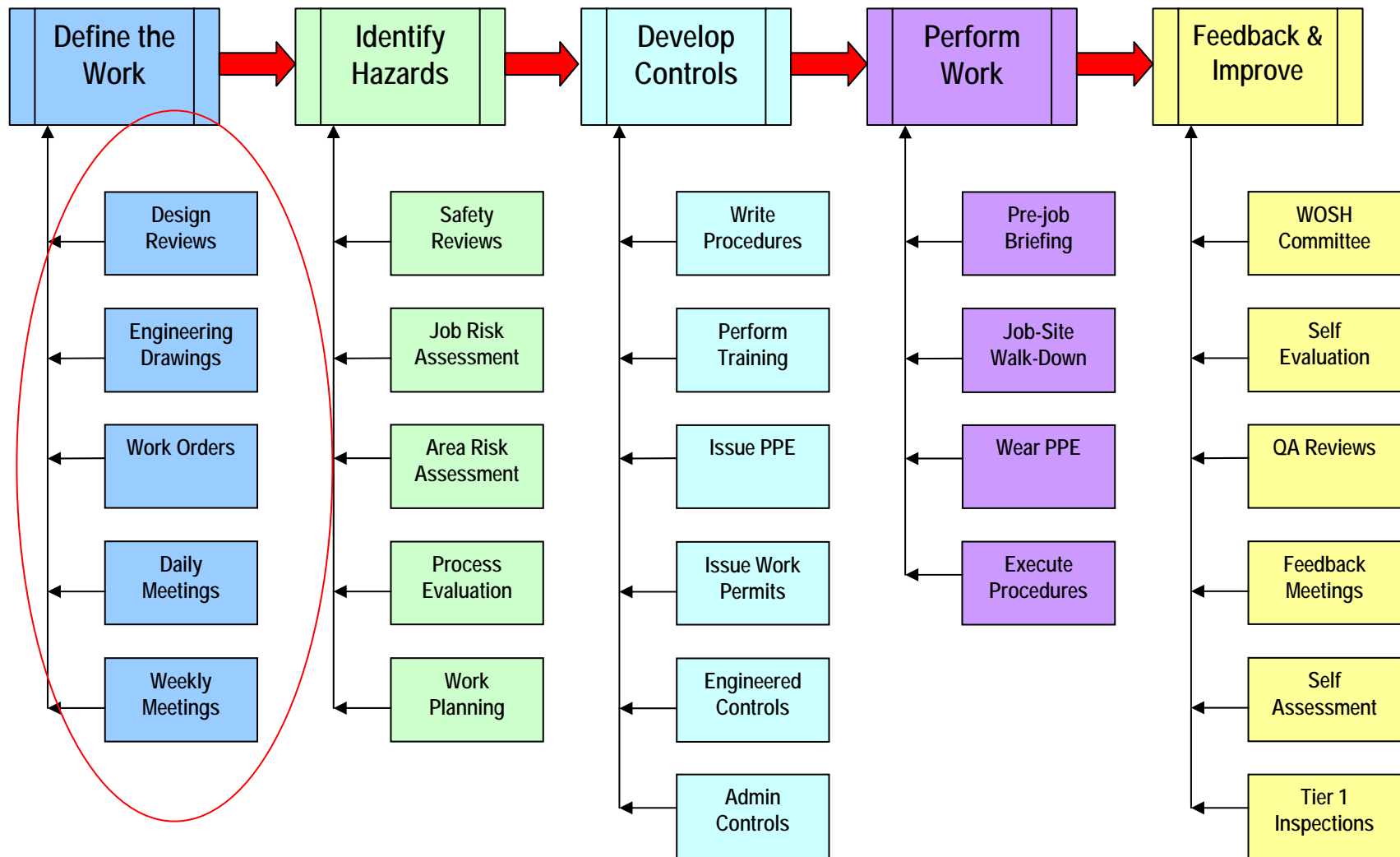


What processes below are considered 'Work Planning'?

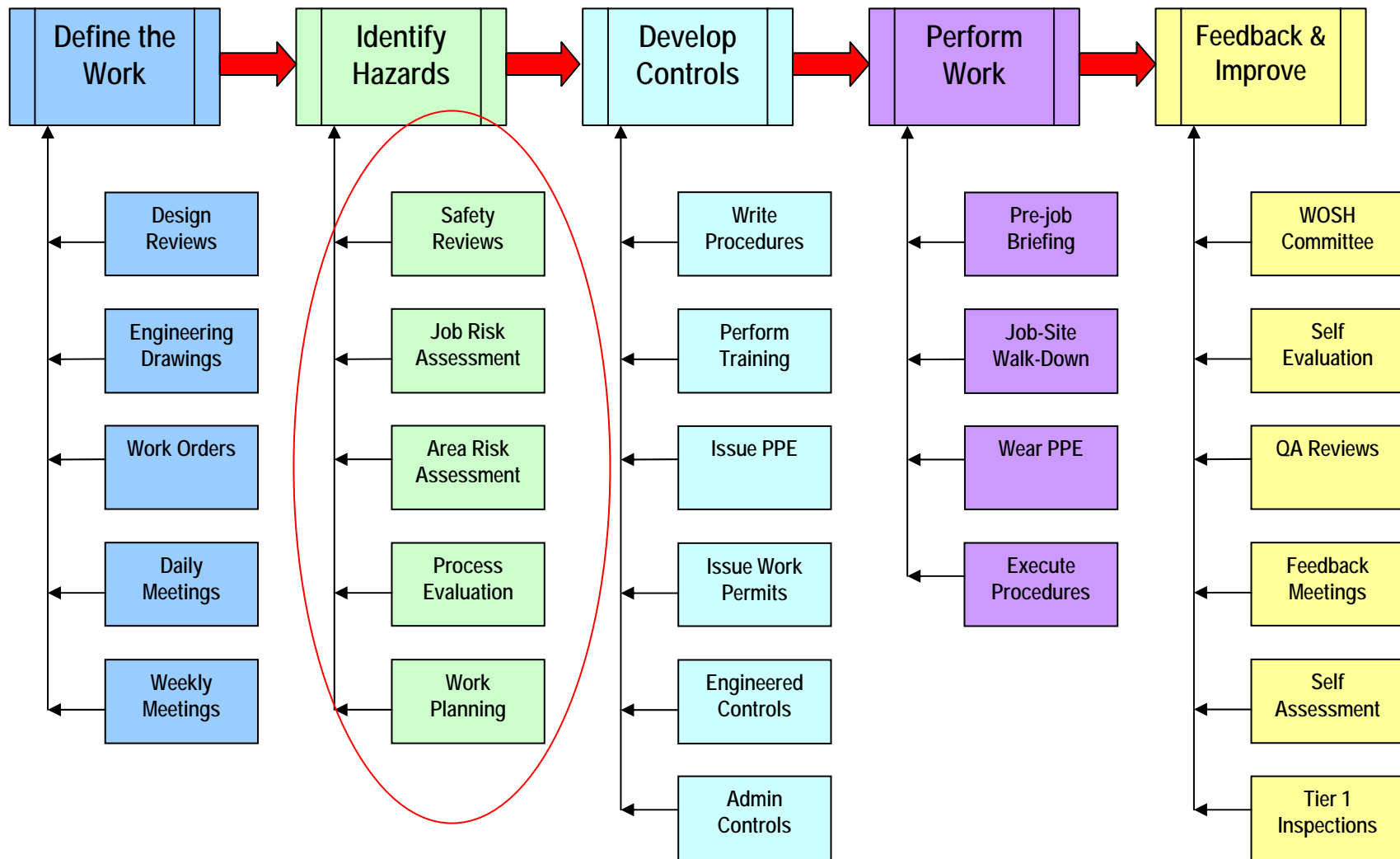


- ALARA/Radiation Safety Design Reviews 2%
- Experiment Safety Reviews 5%
- Accelerator Safety Reviews 5%
- Individual Job Work Permits 15%
- Written Approved Procedures 33%
- Skill of the Worker (Includes Standing Work Permits) 40%

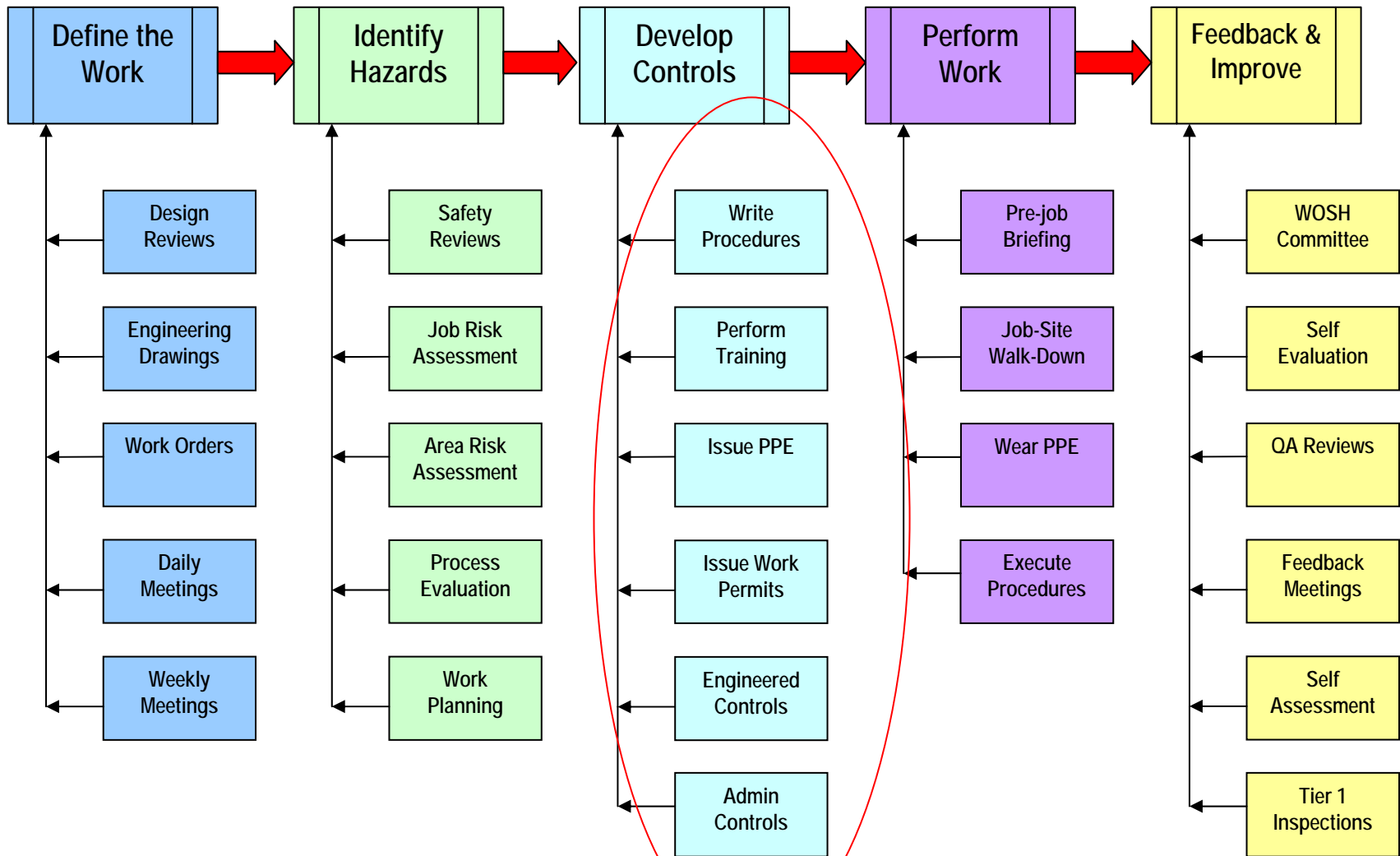
How do we assign work at C-AD?



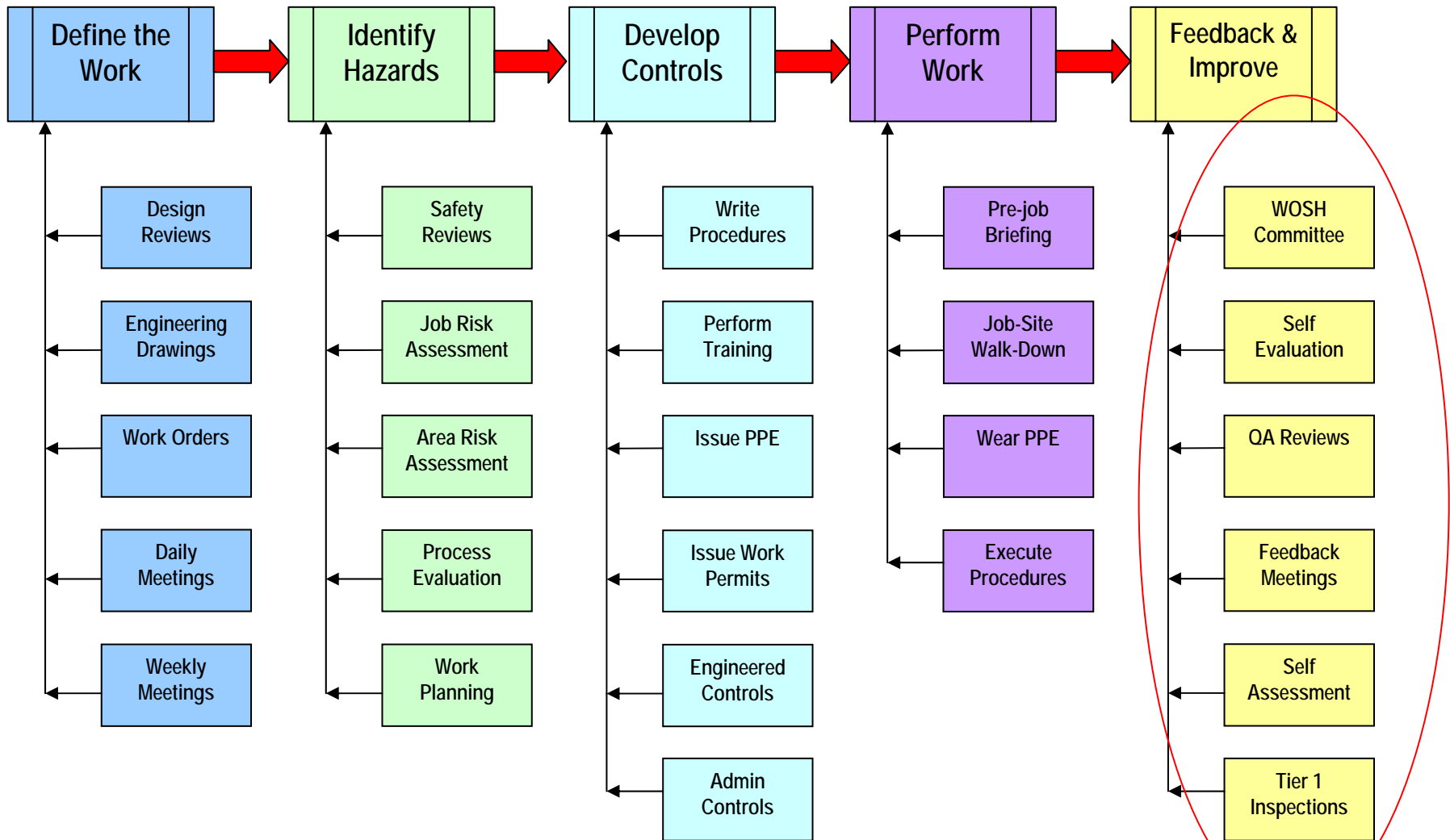
How do we determine if hazards are present?



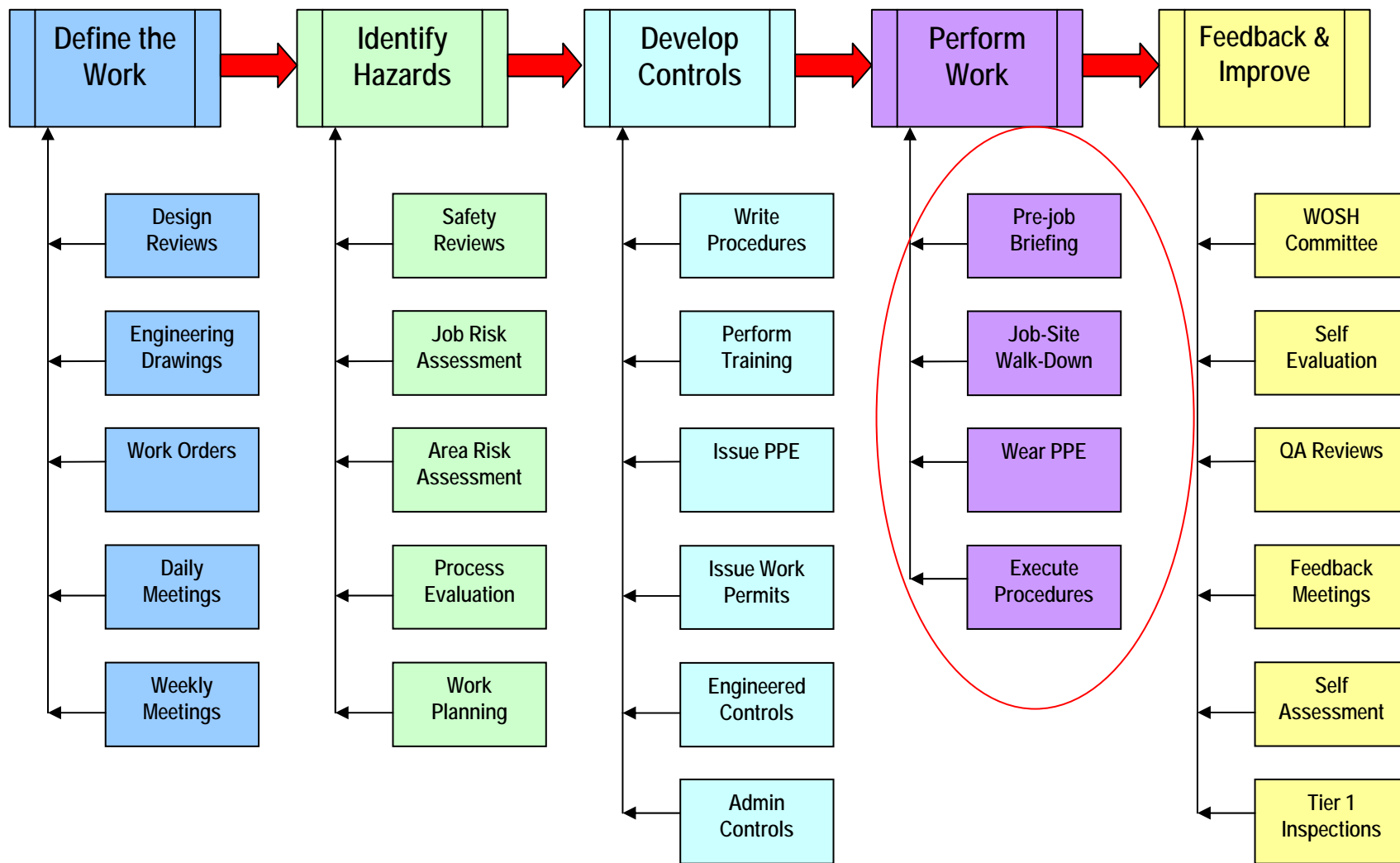
How do we control hazards?



How can you express your OSH concerns within C-AD/SMD?



How do workers prevent injuries and illnesses?



Who is your OSH Management Representative?

- BNL Level – Jim Tarpinian, Assistant Laboratory Director for ESHQ
- BNL OSH Management Representative
- C-AD/SMD – Ed Lessard, Associate Chair for ESHQ
- C-AD/SMD OSH Management Representative



What is a Job Risk Assessment (JRA)?

- A way to find weaknesses in the safety of a facility, area or job
- Used to identify and prioritize improvements in hazard controls
- Workers are involved and input is welcome
- Documented and reviewed annually



How are Job Risk Assessments performed?

- Divide a job into a reasonable number of tasks
- Examine each task for the hazards presented and controls used
- Advantages:
 - Provides a record of the hazards, controls and risk assessment
 - Allows the analysis team and workers to thoroughly review risks
 - Answers basic questions:
 - Should C-AD be doing this job in the first place?
 - Can C-AD reduce risk by adding new controls?
- Disadvantages:
 - Conducting an effective JRA requires a substantial amount of time
 - Does not replace pre-job review and job-site walk down

What could happen if procedures are not followed?

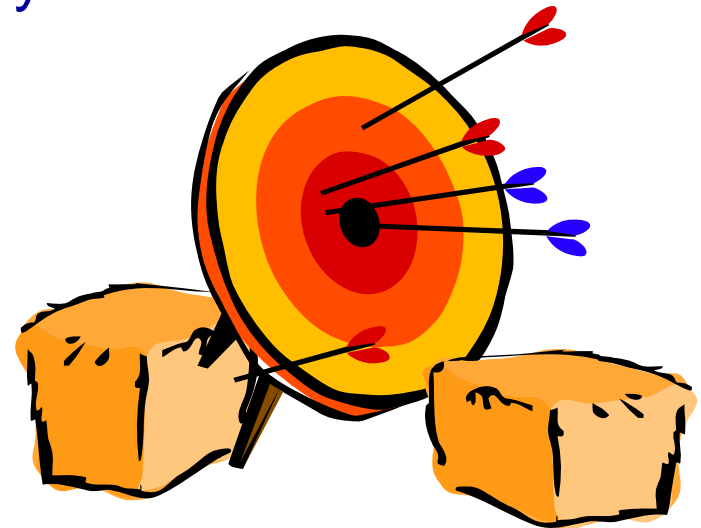
- Resource impact
 - consumption of YOUR time correcting the problem
 - personnel injury or illness
 - \$\$\$ for worker compensation / medical treatment
- Regulatory fines
- Operations shut down temporarily or permanently
- Loss of trust with DOE, the community, regulators, partners
- Disciplinary action, up to and including termination

What are the C-AD/SMD 2006 OSH objectives (goals)?

- Implement items from 2005 Management Review
- Reduce accidents and illness
- Complete closeout of OSHA violations
- Ensure OSH policy awareness
- Emphasize traffic safety
- Emphasize Safety Solutions (S2) program
- Improve industrial hygiene program
- Implement NRTL program
- Improve communications
- Finish arc-flash calculations and label panels

What are C-AD/SMD OSH targets?

- Targets help C-AD/SMD meet the objectives
- There are many targets; examples for 2006:
 - Reduce injuries to zero
 - Perform arc-flash calculations
 - Perform baseline IH surveys
 - ...



What are YOUR responsibilities?

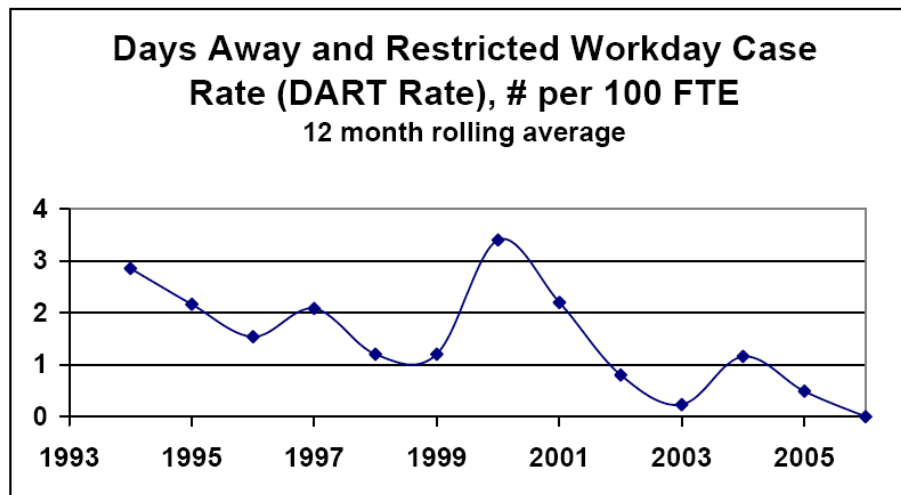
- **Comply** with Laboratory policies, standards, procedures
- **Maintain** your training up-to-date
- **Help identify** hazards and impact of your work
- **Help achieve** objectives and targets related to your work
- **Provide** input on controls/work practices
- **Apply** hazard controls to your work
- **Respond** to emergency situations, alarms, or occurrences as appropriate

How do contractors know about C-AD/SMD/BNL rules?

- Requirements are included in the contract
 - Training, education, experience, licensing
- Work planning or pre-job briefings provide specifics
- Training is provided by BNL and C-AD/SMD where needed

What is Integrated Safety Management?

- ISM is the bike
 - OHSAS 18001 and ISO 14001 are the wheels
 - DOE Conduct of Operations is the handlebar
 - DOE Accelerator Safety Order is the seat



What does line accountability for injuries mean?

- Held accountable but not in a punitive sense
 - Manager responsible for work environment
 - Supervisor responsible for training, awareness and PPE
 - Worker responsible for following rules
- All must step up and share some blame for an injury
 - Consequence: all must work together to prevent in future

What are the basic rules for safety?

Criminal acts:

- 1) While at work, physical or verbal assault, theft or stealing any material or property with the intent to keep, sell or use it for personal gain will result in immediate termination

Significant offenses:

- 2) *Willful* failure to adhere to or follow RSLOTO, LOTO or Orange Tag Procedures in C-AD OPM Chapters 1, 2, 7 or 9
- 3) *Willful* violation of radiation safety requirements
- 4) Fighting or creating a disturbance that causes injury to others; applies to the aggressor only

Major offenses:

- 5) Failure to adhere to or follow property protection rules in C-AD OPM 1.20
- 6) Failure to report lost or stolen keys for a secured area or equipment; duplicating a key made for a secured area or equipment
- 7) Demonstrating a carelessness or indifference to rules regarding sexual harassment, discrimination and computer security

Minor offenses:

- 8) Failure to wear personal protective equipment while performing work requiring this equipment
- 9) Not meeting or maintaining training requirements listed in your Job Training Assessment

Traffic violations and failure to follow safety or security postings:

- 10) Traffic violations constitute safety infractions and could be cause for disciplinary action. Safety or security postings, whether temporary or permanent, *must* be followed by all managers, supervisors and workers. These violations would be categorized as minor and a graded approach would be used to determine major or significant offenses. In the case of repeat offenders, the length of time between violations would be considered.

Questions ?

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